

**Amendments to the Claims:**

This following listing of claims will replace all prior versions, and listings of claims in the application.

**Listing of Claims:**

1. (Cancelled)
2. (Currently amended) The method according to claim ~~41~~, wherein the cereal crop is selected from the group consisting of: rice, wheat, oats, rye, corn, sorghum, and barley.
3. (Cancelled)
4. (Currently amended) ~~The A method of producing granulocyte-macrophage colony stimulating factor (GM-CSF) in a cereal crop comprising growing a cereal crop that has a stably integrated genetic construct that -according to claim 3, wherein the regulatory region-~~ comprises a glutelin ~~4~~-regulatory region operably associated with a GM-CSF coding sequence as set forth in SEQ ID NO:1, or a fragment thereof that retains GM-CSF activity of supporting proliferation of TF-1 cells, operably associated with a transcriptional terminator.
5. (Cancelled)
6. (Currently amended) The method according to claim ~~43~~, wherein the GM-CSF coding sequence encodes an N-terminal methionine residue.
7. (Original) The method according to claim 2, wherein the cereal crop is rice.
8. (Cancelled)
9. (Currently amended) The method according to claim ~~43~~, wherein the GM-CSF coding sequence is operably linked to a signal sequence.
10. (Currently amended) The method according to claim ~~48~~, wherein the GM-CSF coding sequence is nucleotide sequence 55-435 of SEQ ID NO:1.
11. (Cancelled)

12. (Currently amended) The transgenic cereal crop according to claim ~~1411~~, wherein the cereal crop is selected from the group consisting of: rice, wheat, oats, rye, corn, sorghum, and barley.

13. (Cancelled)

14. (Currently amended) ~~The~~ A transgenic cereal crop plant comprising a stably integrated genetic construct that according to claim 13, wherein the regulatory region comprises a glutelin 4-regulatory region operably associated with a GM-CSF coding sequence as set forth in SEQ ID NO:1, or a fragment thereof that retains GM-CSF activity of supporting proliferation of TF-1 cells, operably associated with a transcriptional terminator.

15. (Cancelled)

16. (Currently amended) The transgenic cereal crop according to claim ~~1413~~, wherein the GM-CSF coding sequence encodes an N-terminal methionine residue.

17. (Original) The transgenic cereal crop according to claim 12, wherein the cereal crop is rice, japonica cultivar.

18. (Cancelled)

19. (Currently amended) The transgenic cereal crop according to claim ~~1413~~, wherein the GM-CSF coding sequence is operably linked to a signal sequence.

20. (Currently amended) The transgenic cereal crop according to claim ~~1418~~, wherein the GM-CSF coding sequence is nucleotide sequence 55-435 of SEQ ID NO:1.

21. (Cancelled)

22. (Currently amended) The genetic construct according to claim ~~2421~~, wherein the cereal crop is selected from the group consisting of: rice, wheat, oats, rye, corn, sorghum, and barley.

23. (Cancelled)

24. (Currently amended) ~~The~~ A genetic construct comprising according to claim 23, wherein the regulatory region comprises a glutelin 4-regulatory region operably

associated with a GM-CSF coding sequence as set forth in SEQ ID NO:1, or a fragment thereof that retains GM-CSF activity of supporting proliferation of TF-1 cells, operably associated with a transcriptional terminator.

25. (Cancelled)

26. (Currently amended) The genetic construct according to claim 2423, wherein the GM-CSF coding sequence encodes an N-terminal methionine residue.

27. (Original) The genetic construct according to claim 22, wherein the cereal crop is rice, japonica cultivar.

28. (Cancelled)

29. (Currently amended) The genetic construct according to claim 2423, wherein the GM-CSF coding sequence is operably linked to a signal sequence.

30. (Currently amended) The genetic construct according to claim 2428, wherein the GM-CSF coding sequence is nucleotide sequence 55-435 of SEQ ID NO:1.

31. (Original) An isolated nucleotide sequence comprising the sequence set forth in SEQ ID NO:1.

32. (Currently amended) A DNA vector comprising the genetic construct of claim 2425.

33. (Original) A DNA vector comprising the isolated nucleotide sequence of claim 31.

34. (Currently amended) A transgenic cereal crop plant comprising the genetic construct of claim 2425.

35. (Original) A transgenic cereal crop plant comprising the isolated nucleotide sequence of claim 31.

36-49. (Cancelled)